

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

January 15, 2008

In Reply Refer To: WTR-7

Michael Madison  
PolyPhaser Corporation  
P.O. Box 9000  
2225 Park Place  
Minden, Nevada 89423

**Re: November 27, 2007 Clean Water Act Inspection**

Dear Mr. Madison:

Enclosed is the January 11, 2008 report for our inspection of the PolyPhaser facility at the above address in Minden, Nevada. Please submit to EPA a short response letter to the Summary of Findings in Section 3.0 of this report by **February 29, 2008**. Your letter should include an individual response to each of the numbered findings in Section 3.0. Please send your letter to the attention of Anna Yen at EPA (and include the code "WTR-7" in the address above), with copies to Douglas County and Nevada Division of Environmental Protection.

The main findings are summarized below:

1. This facility is not subject to any federal categorical standards, nor is it a significant industrial user.
2. This facility discharges a very small volume of wastewater to the sewer system.
3. EPA recommends that, because of the low flows, the facility consider directing all discharge flows to an evaporator, thereby becoming a zero discharger.

We would like to thank you for your helpfulness and courtesy during the inspection. We remain available to you and Douglas County to assist in any way. If you have any questions, please call Anna Yen at (415) 972-3976 or e-mail her at [yen.anna@epa.gov](mailto:yen.anna@epa.gov).

Sincerely,  
<Original  
signed by>  
Ken Greenberg  
Chief, CWA Compliance Office

Enclosure

cc: Catherine Pool, Douglas County Community Development, enclosure by e-mail  
Joe Maez, Nevada Division of Environmental Protection, enclosure by e-mail

**U.S. Environmental Protection Agency  
Region 9  
Clean Water Act Compliance Office**

**NPDES Compliance Evaluation Inspection Report**

**Industrial User:** PolyPhaser Corporation  
**Industrial User Address:** 2225 Park Place, Minden, NV 89423  
**Inspection Date:** November 27, 2007

**EPA Region 9 Inspectors:** Greg Arthur, Environmental Engineer  
Anna Yen, Environmental Engineer  
Water Division, CWA Compliance Office

**Douglas County Inspectors:** Catherine Pool, Civil Engineer Senior  
Douglas County Community Development

**Facility Contacts During Inspection:** Michael Madison, Machine Shop/Facilities Manager

*Report Prepared by Anna Yen on January 11, 2008.*

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## **1.0 Scope and Purpose**

The State of Nevada ("the State") does not have delegation of the CWA authority regarding pretreatment. The local publicly owned treatment works (POTW), the Douglas County North Valley Wastewater Treatment Plant, does not discharge to surface waters. The receiving water body is groundwater via percolation from reuse irrigation. Therefore, the State's Nevada Division of Environmental Protection (NDEP) has issued a groundwater permit and not an NPDES permit to the treatment plant.

Without an NPDES permit, the POTW does not have pretreatment requirements, and the municipality, Douglas County Community Development ("Douglas County" or "the County"), does not have a pretreatment program.\* In effect, the discharge of industrial facilities is unregulated at the state and local levels. EPA provides pretreatment regulation of these facilities at the federal level. The purpose of the inspection on November 27, 2007 was to determine the standards and requirements that do apply to these facilities and to ensure compliance with those standards and requirements.

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\* Douglas County has been working on establishing local limits for the past several years.

## 1.1 General and Process Description

PolyPhaser moved its facility to this Minden location in December 1989. This facility manufactures lightning and surge protection, primarily serving the telecommunications industry.

Some of the parts are manufactured at this Minden facility. Other parts are manufactured elsewhere, either outside the company or at other PolyPhaser manufacturing facilities, including one in China. Parts are manufactured from brass, aluminum, and in rare cases, stainless steel.

Metalworking is performed on various types of machines including lathes. A water-based coolant is used in these machines. The coolant is continuously recirculated for reuse in each machine. Once the coolant is spent, it is hauled offsite by Safety-Kleen. In some cases, metal such as copper is sold in certain lengths. So the only work that is done to the metal is that it is cut to length. In the saw room, a vegetable-based oil is atomized onto the saw. Therefore, no wastewater is generated. Scrap metals are sent to Solid Waste Recovery for recycling.

After machining, each part is rinsed off with water and mild soap. The water-soap solution is collected in a bucket. The buckets are manually transported over to a sink and emptied into the sink. A cloth placed over the bucket acts as a filter. Approximately thirty gallons per day are emptied into the sink. *See Photo 1 in the Appendix.*

Polishing of metal parts is performed by a vibratory machine in a separate room. The machine is filled with steel media, and the parts are vibrated within this media combined with a water-mild soap solution. The water-soap solution drains out of the bin, is sent through cartridge filters, and flows to a floor drain which leads to the sewer system. A sink which drains to the sewer system is also located in this room. *See Photo 2 in the Appendix.*

Wave soldering and reflow machines in the facility are not operating at full scale yet. Regardless, no water is used, and PolyPhaser collects the solder waste in a container. The facility also uses an ultrasonic cleaner. The wastewater generated is collected and emptied into a sink which leads to the sewer system.

## 1.2 Facility Wastewater Sources and Other Wastes

PolyPhaser generates wastewater from the following sources:

- Washing of metal parts after metalworking
- Vibratory polishing of metal parts
- Ultrasonic cleaner

Other liquid wastes include spent coolant which is hauled offsite by Safety-Kleen. The only solid wastes are metal scraps from the metal machining. These solid wastes are hauled offsite to be recycled.

### **1.3 Facility Process Wastewater Treatment System**

No treatment system.

### **1.4 Wastewater Discharge**

This facility discharges a very small volume of wastewater to the sewer system. This wastewater discharges to the Douglas County North Valley Wastewater Treatment Plant. The treatment plant is owned and operated by Douglas County. The Douglas County North Valley Wastewater Treatment Plant is operated under a State groundwater permit (No. NEV60025).

Since the facility has low-flow discharges, EPA recommends that the facility consider the use of an evaporator. Implementing this relatively simple alternative would result in zero discharge, subjecting the facility to fewer monitoring requirements once Douglas County begins to issue discharge permits to industrial users.

### **2.0 Compliance with Federal Categorical Standards**

This facility is not subject to any federal categorical standards.

#### **2.1 Compliance with Other Federal Pretreatment Requirements**

This facility is not a significant industrial user (SIU) because it is not subject to a federal categorical standard. In addition, it discharges less than 25,000 gallons per day of process wastewater to the POTW. Its wastewater is primarily washwater from cleaning metal parts; therefore, it has no reasonable potential for adversely affecting the POTW's operation or for violating Pretreatment Standards.

#### **2.2 Compliance with Local Limits**

Douglas County has not yet established any local limits. Douglas County should develop local limits to protect the POTW from adverse impacts and to help prevent violations of its State-issued permit.

### **3.0 Summary of Findings**

1. This facility is not subject to any federal categorical standards.
2. This facility is not an SIU.
3. This facility discharges a very small volume of wastewater to the sewer system.

4. EPA recommends that, because of the low flows, the facility consider directing all discharge flows to an evaporator, thereby becoming a zero discharger.

## Appendix: Photos



**Photo 1**

Photo #1: Sink into which facility disposes used water-soap solution from cleaning of machined parts

*Taken by Greg Arthur on November 27, 2007*



**Photo 2**

Photo #2: Room containing the vibratory machine for polishing metal parts

*Taken by Greg Arthur on November 27, 2007*